



JUNE 12, 2019

Warren-Alquist State Energy Building
1516 Ninth Street
Art Rosenfeld Hearing Room
Sacramento, California 95814
10 a.m.
(Wheelchair Accessible)

THE COMMISSION WILL CONSIDER AND MAY TAKE ACTION ON THE FOLLOWING:

1. **Consent Calendar.** (Items will be taken up and voted on as a group. A commissioner may request that an item be moved and discussed later in the meeting.)
 - a. **BISHOP PAIUTE TRIBE.** Proposed resolution approving Agreement 700-19-001 with the Bishop Paiute Tribe for a \$4,999 contract to co-sponsor the 2019 Sustaining Tribal Resources Conference. The event will feature a Tribe/State dialogue concerning the identification, planning, and development of tribal renewable energy and climate change adaptation consistent with state renewable energy goals. (ERPA Funding) Contact: Hilarie Anderson.
 - b. **CITIZENS OVERSIGHT BOARD.** Proposed resolution approving MOU-19-001 between the California Energy Commission and the Citizens Oversight Board. This memorandum of understanding is to affirm that the California Energy Commission will provide operational and administrative services to the Citizens Oversight Board to the extent feasible and allowed by law. This memorandum of understanding also details the Energy Commission's responsibility to hold and administer the funds for the Citizens Oversight Board with the Board maintaining discretion in how those funds are spent, including entering into and approving agreements with third parties. Contact: Jack Bastida.
 - c. **STANFIELD SYSTEMS, INC.** Proposed resolution approving Purchase Order #18-409 00-011 for \$149,680, for support and maintenance of the Dynasim modeling software, which houses the Energy Commission's transportation demand forecasting models. This agreement will provide technical support to the underlying front-end and database, and provide further support for transitioning maintenance of the models to in-house staff. (COIA Funding) Contact: Jesse Gage.
 - d. **ELECTRIC POWER RESEARCH INSTITUTE.** Proposed resolution approving Agreement 200-19-008 with the Electric Power Research Institute (EPRI) for a \$10,000 contract to co-sponsor the 2019 Pathways to Decarbonization in the Western U.S.

Symposium, which will take place in July 11-12 in Berkeley, California. (ERPA Funding) Contact: Terra Weeks.

2. MALBURG GENERATING STATION (01-AFC-25C). Proposed order granting the petition to amend the facility license to allow for the operation of a previously installed turbine upgrade package for both combustion turbines, modification of existing Energy Commission air quality conditions of certification for consistency with the South Coast Air Quality Management District language, and modification of a fire pump testing restriction. Staff concludes that with implementation of new or revised air quality conditions of certification, the proposed modifications would not result in a significant impact on the environment, and the project would continue to comply with applicable laws, ordinances, regulations, and standards. Contact: Anwar Ali. (Staff presentation: 5 minutes)
3. BRUCE A. WILCOX, P.E. Proposed resolution approving Agreement 400-18-003 with Bruce A. Wilcox, P.E. for \$4,500,000 to provide technical support and implementation for the open source California Building Energy Code Compliance (CBECC) software for both nonresidential (CBECC-Com) and residential (CBECC-Res) buildings. (COIA Funding) Contact: Adrian Ownby. (Staff presentation: 5 minutes)
4. OFFICE OF PLANNING AND RESEARCH/STRATEGIC GROWTH COUNCIL. Proposed resolution approving Agreement 700-18-007 with the Office of Planning and Research/Strategic Growth Council for a \$2,350,000 Interagency Agreement to implement the Tribal Government Challenge Program for tribal planning grants and a statewide gap analysis to determine tribal energy needs and gaps. (ARRA funding) Contact: Hilarie Anderson. (Staff presentation: 5 minutes)
5. CERRITOS COMMUNITY COLLEGE DISTRICT. Proposed resolution approving Agreement 600-18-006 with Cerritos Community College District for \$1,004,393 to develop and deliver electric school bus training for school district maintenance technicians and drivers related to the Senate Bill 110 School Bus Retrofit and Replacement Program. (ARFVTP Funding) Contact: Tami Haas. (Staff presentation: 5 minutes)
6. OUTREACH, EDUCATION, AND COLLABORATIVE PLANNING FOR CALIFORNIA'S CENTRAL VALLEY, GFO-18-603. This solicitation sought proposals to assist the Central Valley in accelerating the adoption of alternative fuel vehicles and advanced vehicle technologies, with the ultimate goal of addressing greenhouse gas emissions, air quality emission challenges, and equity issues. (ARFVTP funding) Contact: Susan Ejlalmaneshan. (Staff presentation: 5 minutes)
 - a. FRESNO METRO BLACK CHAMBER FOUNDATION. Proposed resolution approving Agreement ARV-18-030 with the Fresno Metro Black Chamber Foundation for a \$614,945 grant to support the rapid growth of light-duty electric vehicles in the San Joaquin Valley through outreach for electric car-sharing and ridesharing services, electric vehicle marketing and education campaigns, and development of an electric vehicle ambassadorship program.
 - b. GLADSTEIN NEANDROSS & ASSOCIATES LLC. Proposed resolution approving Agreement ARV-18-031 with Gladstein Neandross & Associates LLC for a \$697,662 grant to support the deployment of clean medium- and heavy-duty transportation in California's Central Valley by providing commercial entities with information about

clean transportation fuels and technologies, providing technical assistance to fleets that pursue these options, facilitating access to incentives, and increasing community engagement.

7. ZERO-EMISSION VEHICLE AND ZERO-EMISSION VEHICLE INFRASTRUCTURE MANUFACTURING, GFO-18-605. This solicitation sought proposals to support supply chains in California that manufacture Zero Emission Vehicles (ZEV) and ZEV infrastructure technologies. These technologies will be manufactured in-state to help meet the state's goal of 5 million ZEVs on the road by 2030. (ARFVTP Funding) Contact: Larry Rillera. (Staff presentation: 5 minutes)
 - a. TRANSPORTATION POWER, INC. Proposed resolution approving Agreement ARV-18-025 with Transportation Power, Inc. (dba TransPower) for a \$1,183,921 grant to upgrade ZEV component manufacturing capabilities at TransPower's existing facilities, and adopting staff's determination that this action is exempt from CEQA.
 - b. PROTERRA, INC. Proposed resolution approving Agreement ARV-18-026 with Proterra, Inc. for a \$1,817,709 grant to install manufacturing equipment at their all-electric bus manufacturing facility in the City of Industry and adopting staff's determination that this action is exempt from CEQA.
 - c. ZERO MOTORCYCLES, INC. Proposed resolution approving Agreement ARV-18-027 with Zero Motorcycles, Inc. for a \$1,898,370 grant to implement a series of manufacturing changes to improve throughput and manufacturing capability and adopting staff's determination that this action is exempt from CEQA.
8. RIALTO BIOENERGY FACILITY LLC. Proposed resolution adopting California Environmental Quality Act findings and statement of overriding considerations for Rialto Bioenergy Facility, LLC's bioenergy facility project and approving Agreement ARV-18-029 with Rialto Bioenergy Facility, LLC. (ARFVTP Funding) Contact: Hieu Nguyen. (Staff presentation: 5 minutes)
 - a. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that – based on the lead agency, the City of Rialto's, certified Final Environmental Impact Report, adopted Mitigation, Monitoring and Reporting Program, adopted Statement of Overriding Considerations, resolution regarding the aforementioned documents, as well as the City of Rialto's resolution approving the project, its filed Notice of Determination, and the City of Rialto's Action Agenda – the work under the proposed project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated; and adopting a statement of overriding considerations.
 - b. RIALTO BIOENERGY FACILITY LLC'S BIOMETHANE PROJECT. Agreement with Rialto Bioenergy Facility, LLC for a \$2,916,620 grant to revitalize the Rialto Bioenergy Facility in Bloomington, California to produce 2.5 million diesel gallon equivalents of biomethane transportation fuel.
9. DEMONSTRATION-SCALE BIOFUELS PRODUCTION FACILITIES, GFO-18-602. This solicitation sought proposals to provide grant funds for biofuels projects that scale up, scale out, and prove a technology or process. (ARFVTP Funding) Contact: Hieu Nguyen. (Staff presentation: 5 minutes)

- a. OBERON FUELS, INC. Proposed resolution adopting CEQA findings for Oberon Fuel's "Renewable DME: Pathway to Zero-Emission Vehicles" project, and approving Agreement ARV-18-018 with Oberon Fuels, Inc.
 - i. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, based on Imperial County Planning and Development Services Department's (the lead agency) Initial Study and Mitigated Negative Declaration, additional information about project modifications, and the lead agency's environmental review of the additional project information, the work under the proposed grant project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated.
 - ii. OBERON FUELS, INC.'S RENEWABLE DME: PATHWAY TO ZERO-EMISSION VEHICLES PROJECT. Proposed resolution approving Agreement ARV-18-018 with Oberon Fuels, Inc. for a \$2,876,139 grant to scale up and modify the existing Oberon Fuels dimethyl-ether (DME) pilot production plant in Brawley, California.
 - b. TECHNIKON LLC. Proposed resolution approving Agreement ARV-18-028 with Technikon LLC for a \$1,125,000 grant to demonstrate an innovative technology, the Hyper-Philic anaerobic digestion (AD) system, at a waste processing facility, and adopting staff's determination that this action is exempt from CEQA.
10. RENEWABLE ENERGY FOR AGRICULTURE PROGRAM, GFO-18-401. This solicitation sought proposals to accelerate the adoption of onsite renewable energy technologies on agricultural operations to reduce GHG emissions, reduce demand for fossil fuels and grid electricity, and provide additional co-benefits. (GGRF funding) Contact: Geoff Dodson. (Staff presentation: 10 minutes)
- a. SUMMERFIELD WALDORF SCHOOL AND FARM. Proposed resolution approving Agreement REA-18-001 with Summerfield Waldorf School and Farm for a \$347,205 grant to install a 114 kW solar photovoltaic (PV) system and electric vehicle (EV) charging infrastructure to serve a school farm integrated into educational curriculum in Sonoma County, and adopting staff's determination that this action is exempt from CEQA.
 - b. FULL BELLY FARM, INC. Proposed resolution approving Agreement REA-18-002 with Full Belly Farm, Inc. for a \$75,976 grant to install a 61.2 kW solar PV system and EV charging infrastructure to serve a vegetable and grain farm in Yolo County, and adopting staff's determination that this action is exempt from CEQA.
 - c. JS JOHAL & SONS, INC. Proposed resolution approving Agreement REA-18-004 with JS Johal & Sons, Inc. for a \$272,220 grant to install a 147.55 kW solar PV system to serve a walnut farm in Sutter County, and adopting staff's determination that this action is exempt from CEQA.
 - d. NEIL MCISAAC & SON, INC. Proposed resolution approving Agreement REA-18-006 with Neil McIsaac & Son, Inc. for a \$349,115 grant to install a 147 kW solar PV system and EV charging infrastructure to serve a dairy farm in Marin County, and adopting staff's determination that this action is exempt from CEQA.

- e. TAHMAZIAN FARMING, LP. Proposed resolution approving Agreement REA-18-007 with Tahmazian Farming, LP for a \$31,500 grant to install a 25.65 kW solar PV system to serve a fruit farm in Fresno County, and adopting staff's determination that this action is exempt from CEQA.
- f. BLANCO FARMS, LLC. Proposed resolution approving Agreement REA-18-008 with Blanco Farms, LLC for a \$350,000 grant to install a 110 kW solar PV system, EV charging infrastructure, and to replace a diesel pump with an electric pump to serve a vegetable farm in Monterey County, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.
- g. ADAM METTLER DBA FERMENTED VISION. Proposed resolution approving Agreement REA-18-009 with Adam Mettler DBA Fermented Vision for a \$48,290 grant to install a 52.5 kW solar PV system to serve a vineyard in San Joaquin County, and adopting staff's determination that this action is exempt from CEQA.
- h. CHERRY ROAD VINEYARDS, LLC. Proposed resolution approving Agreement REA-18-010 with Cherry Road Vineyards, LLC for a \$32,740 grant to install a 33 kW solar PV system to serve a vineyard in San Joaquin County, and adopting staff's determination that this action is exempt from CEQA.
- i. LOMA SECA, L.L.C. Proposed resolution approving Agreement REA-18-011 with Loma Seca, L.L.C. for a \$73,407 grant to install a 22 kW solar PV system with battery storage and EV charging infrastructure to serve a vineyard in San Luis Obispo County, and adopting staff's determination that this action is exempt from CEQA.
- j. MISSION RANCHES COMPANY, LLC. Proposed resolution approving Agreement REA-18-012 with Mission Ranches Company, LLC for a \$350,000 grant to install a 357.8 kW solar canopy PV system and EV charging infrastructure to serve Merrill Ranch vegetable farm in Monterey County, and adopting staff's determination that this action is exempt from CEQA.
- k. REITER BERRY FARMS, INC. Proposed resolution approving Agreement REA-18-013 with Reiter Berry Farms, Inc. for a \$350,000 grant to install a 198 kW solar PV system and EV charging infrastructure to serve a berry farm in Monterey County, and adopting staff's determination that this action is exempt from CEQA.
- l. RAHUL FAMILY FARMS, L.P. Proposed resolution approving Agreement REA-18-014 with Rahul Family Farms, L.P. for a \$37,902 grant to install a 24.64 kW solar PV system to serve an orchard in Yuba County, and adopting staff's determination that this action is exempt from CEQA.
- m. ROCKN R RANCH, INC. Proposed resolution approving Agreement REA-18-015 with ROCKN R Ranch, Inc. for a \$147,000 grant to install a 152.1 kW solar PV system to serve an almond farm in Fresno County, and adopting staff's determination that this action is exempt from CEQA.
- n. HASS HEIGHTS GROWERS, INC. Proposed resolution approving Agreement REA-18-016 with Hass Heights Growers, Inc. for a \$42,551 grant to install a 63.65 kW solar PV

system to serve an avocado and coffee bean farm in San Diego County, and adopting staff's determination that this action is exempt from CEQA.

- o. SUNSHINE AGRICULTURE, INC. Proposed resolution approving Agreement REA-18-017 with Sunshine Agriculture, Inc. for a \$348,482 grant to install a 170.4 kW solar PV system and EV charging infrastructure to serve Poso Creek Ranch almond farm in Kern County, and adopting staff's determination that this action is exempt from CEQA.
- p. NEIL BASSETTI FARMS, LLC. Proposed resolution approving Agreement REA-18-018 with Neil Bassetti Farms, LLC for a \$302,944 grant to install a 198 kW solar PV system and EV charging infrastructure to serve a vegetable farm in Monterey County, and adopting staff's determination that this action is exempt from CEQA.
- q. AGRICULTURE AND LAND-BASED TRAINING ASSOCIATION. Proposed resolution approving Agreement REA-18-019 with Agriculture and Land-Based Training Association for a \$349,836 grant to install a 170.4 kW solar PV system and EV charging infrastructure to serve an organic farm on a farmer training facility in Monterey County, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.
- r. X-LINE FARMS, LLC. Proposed resolution approving Agreement REA-18-020 with X-Line Farms, LLC. for a \$298,402 grant to install two solar PV systems totaling 39.6 kW, battery energy storage, and EV charging infrastructure to serve a vineyard in San Luis Obispo County, and adopting staff's determination that this action is exempt from CEQA.
- s. LUIS A. SCATTINI FAMILY LIMITED PARTNERSHIP. Proposed resolution approving Agreement REA-18-021 with Luis A. Scattini Family Limited Partnership for a \$349,836 grant to install a 170.4 kW solar PV system and EV charging infrastructure to serve a mixed-vegetable farm on Luis Ranch in Monterey County, and adopting staff's determination that this action is exempt from CEQA.
- t. LUIS A. SCATTINI FAMILY LIMITED PARTNERSHIP. Proposed resolution approving Agreement REA-18-022 with Luis A. Scattini Family Limited Partnership for a \$349,836 grant to install a 170.4 kW solar PV system and EV charging infrastructure, and to replace a diesel pump with an electric pump to serve a mixed-vegetable farm on Spreckels Ranch in Monterey County, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.
- u. SUNSHINE AGRICULTURE, INC. Proposed resolution approving Agreement REA-18-023 with Sunshine Agriculture, Inc. for a \$348,482 grant to install a 170.4 kW solar PV system and EV charging infrastructure to serve Freedom Ranch almond farm in Kern County, and adopting staff's determination that this action is exempt from CEQA.
- v. CALIFORNIA OLIVE RANCH, INC. Proposed resolution approving Agreement REA-18-024 with California Olive Ranch, Inc. for a \$300,000 grant to install a 240 kW solar PV system to serve an olive farm in Glenn County, and adopting staff's determination that this action is exempt from CEQA.

- w. MATTHEW EFIRD. Proposed resolution approving Agreement REA-18-025 with Matthew Efird for a \$31,500 grant to install a 32.68 kW solar PV system to serve a fruit farm in Fresno County, and adopting staff's determination that this action is exempt from CEQA.
- x. RUSSEL AND KATHLEEN EFIRD FAMILY TRUST. Proposed resolution approving Agreement REA-18-026 with Russel and Kathleen Efird Family Trust for a \$140,000 grant to install a 144.4 kW solar PV system to serve an alfalfa farm in Fresno County, and adopting staff's determination that this action is exempt from CEQA.
- y. JAMES EFIRD AND THE JAMES EFIRD DISCLAIMER TRUST. Proposed resolution approving Agreement REA-18-027 with James Efird and the James Efird Disclaimer Trust for a \$168,000 grant to install a 173.28 kW solar PV system to serve a walnut and almond farm in Fresno County, and adopting staff's determination that this action is exempt from CEQA.
- z. TAHMAZIAN FARMING, LP. Proposed resolution approving Agreement REA-18-028 with Tahmazian Farming, LP for a \$40,375 grant to install a 32.94 kW solar PV system to serve a walnut and almond farm in Kings County, and adopting staff's determination that this action is exempt from CEQA.
- aa. TAHMAZIAN FARMING, LP. Proposed resolution approving Agreement REA-18-029 with Tahmazian Farming, LP for a \$81,000 grant to install a 61.6 kW solar PV system to serve a fruit farm in Tulare County, and adopting staff's determination that this action is exempt from CEQA.
- bb. BRYAN L. TAHMAZIAN. Proposed resolution approving Agreement REA-18-030 with Bryan L. Tahmazian for a \$144,500 grant to install a 123.2 kW solar PV system to serve a walnut and almond farm in Kings County, and adopting staff's determination that this action is exempt from CEQA.
- cc. MARGARITA VINEYARDS LLC. Proposed resolution approving Agreement REA-18-031 with Margarita Vineyards, LLC for a \$348,482 grant to install a 170.4 kW solar PV system and EV charging infrastructure to serve West Ranch vineyard in San Luis Obispo County, and adopting staff's determination that this action is exempt from CEQA.
- dd. MARGARITA VINEYARDS LLC. Proposed resolution approving Agreement REA-18-032 with Margarita Vineyards, LLC for a \$348,482 grant to install a 170.4 kW solar PV system and EV charging infrastructure to serve East Ranch vineyard in San Luis Obispo County, and adopting staff's determination that this action is exempt from CEQA.
- ee. GALLO CATTLE COMPANY, LP DBA JOSEPH GALLO FARMS. Proposed resolution approving Agreement REA-18-033 with Gallo Cattle Company, LP DBA Joseph Gallo Farms for a \$349,241 grant to install a 67.2 kW solar PV system, battery energy storage, and EV charging infrastructure to serve an almond farm in Merced County, and adopting staff's determination that this action is exempt from CEQA.
- ff. DAVIS VINEYARDS, INC. Proposed resolution approving Agreement REA-18-034 with Davis Vineyards, Inc. for a \$300,000 grant to install a 244.11 kW solar PV system to serve a vineyard in Madera County, and adopting staff's determination that this action is exempt from CEQA.

- gg. GARY & ELENE ESAJIAN FAMILY TRUST. Proposed resolution approving Agreement REA-18-035 with Gary & Elene Esajian Family Trust for a \$131,250 grant to install two solar PV systems generating 110.7 kW to serve a fruit and nut orchard in Kings County, and adopting staff's determination that this action is exempt from CEQA.
- hh. GARY & ELENE ESAJIAN FAMILY TRUST. Proposed resolution approving Agreement REA-18-036 with Gary & Elene Esajian Family Trust for a \$33,500 grant to install a 27 kW solar PV system to serve a walnut orchard in Kings County, and adopting staff's determination that this action is exempt from CEQA.
- ii. MIKAELIAN & SONS, INC. Proposed resolution approving Agreement REA-18-037 with Mikaelian & Sons, Inc. for a \$60,000 grant to install a 44.2 kW solar PV system to serve a fruit and nut orchard in Tulare County, and adopting staff's determination that this action is exempt from CEQA.
- jj. MISSION RANCHES COMPANY, LLC. Proposed resolution approving Agreement REA-18-038 with Mission Ranches Company, LLC for a \$350,000 grant to install a 357.8 kW solar PV system and EV charging infrastructure to serve Coastal Ranch vegetable farm in Monterey County, and adopting staff's determination that this action is exempt from CEQA.
- kk. PAI DELANO 1500 RANCHES, LLC. Proposed resolution approving Agreement REA-18-039 with PAI Delano 1500 Ranches, LLC for a \$349,836 grant to install a 170.4 kW solar PV system and EV charging infrastructure to serve an almond and grape orchard on Ranch 2N in Tulare County, and adopting staff's determination that this action is exempt from CEQA.
- ll. PAI DELANO 1500 RANCHES, LLC. Proposed resolution approving Agreement REA-18-040 with PAI Delano 1500 Ranches, LLC for a \$349,836 grant to install a 170.4 kW solar PV system and EV charging infrastructure to serve an almond and grape orchard on Ranch 1 in Tulare County, and adopting staff's determination that this action is exempt from CEQA.
- mm. PHILLIPS FARMS, LLC DBA MICHAEL DAVID WINERY. Proposed resolution approving Agreement REA-18-041 with Phillips Farms, LLC DBA Michael David Winery for a \$25,690 grant to install a 15 kW solar PV system to serve a vineyard in San Joaquin County, and adopting staff's determination that this action is exempt from CEQA.
- nn. RAHUL FAMILY FARMS, L.P. Proposed resolution approving Agreement REA-18-042 with Rahul Family Farms, L.P. for a \$90,405 grant to install a 40.96 kW solar PV system to serve a walnut orchard in Sutter County, and adopting staff's determination that this action is exempt from CEQA.
- oo. MARSHA HABIB. Proposed resolution approving Agreement REA-18-043 with Marsha Habib for a \$76,446 grant to install a 27 kW solar PV pumping system, a 9 kW solar PV system, battery energy storage, and EV charging infrastructure to serve a mixed-crop farm in San Benito County, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.

11. **FOOD PRODUCTION INVESTMENT PROGRAM.** Solicitation GFO-18-903 sought proposals to install drop-in and emerging energy technologies at California food processing plants, demonstrate their reliability and effectiveness, and help California food processors work towards a low carbon future. The technologies funded will reduce energy use and greenhouse gas emissions associated with food production. (GGRF funding) Contact: Kevin Uy. (Staff presentation: 10 minutes)
- a. **RICH PRODUCTS CORPORATION.** Proposed resolution approving Agreement FPI-18-014 with Rich Products Corporation for a \$1,760,944 grant to install and operate an advanced, high efficiency refrigeration system using transcritical carbon dioxide at the Recipient's baked products manufacturing facility in Torrance, and adopting staff's determination that this action is exempt from CEQA.
 - b. **YOSEMITE FOODS, INC.** Proposed resolution approving Agreement FPI-18-015 with Yosemite Foods, INC for a \$381,000 grant to install and operate an advanced heat recovery system at the Recipient's meat processing facility in Stockton, and adopting staff's determination that this action is exempt from CEQA. The heat recovery system will be incorporated into an existing, large-scale transcritical carbon dioxide refrigeration system. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.
 - c. **PACIFIC COAST PRODUCERS.** Proposed resolution approving Agreement FPI-18-016 with Pacific Coast Producers for a \$2,915,387 grant to install and operate an advanced energy efficient multistage evaporator system and steam turbines at the recipient's tomato processing facility in Woodland, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.
 - d. **INGOMAR PACKING COMPANY, LLC.** Proposed resolution approving Agreement FPI-18-018 with Ingomar Packing Company, LLC for a \$3,500,000 grant to design, install, and operate a microgrid system that will produce and store renewable electricity at the recipient's tomato processing facility in Los Banos, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.
 - e. **IF COPACK, LLC DBA INITIATIVE FOODS.** Proposed resolution approving Agreement FPI-18-019 with IF Copack, LLC dba Initiative Foods for a \$730,076 grant to install a high efficiency energy system at the Recipient's baby food production facility in Sanger, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.
 - f. **E & J GALLO WINERY.** Proposed resolution approving Agreement FPI-18-020 with E & J Gallo Winery for a \$922,151 grant to install energy efficient compressor packages at the Recipient's wine production facility in Livingston, and adopting staff's determination that this action is exempt from CEQA.
12. **PRODUCTION SCALE-UP FOR CLEAN ENERGY TECHNOLOGIES, GFO-18-302**
ADDENDUM 1. This solicitation sought proposals to help clean energy entrepreneurs successfully scale-up their emerging best-of-class technology to the pilot production stage at

manufacturing facilities located in California. (EPIC funding) Contact: Benson Gilbert. (Staff presentation: 10 minutes)

- a. PRIMUS POWER CORPORATION. Proposed resolution approving Agreement EPC-18-012 with Primus Power Corporation for a \$4,000,000 grant to increase Primus' manufacturing capacity of the Primus Power EnergyPod 2, a zinc bromide flow battery that offers energy storage with an estimated five hours of continuous output at 25 kW, a useful life of 20 years, no electrode stack replacement, and a non-flammable electrolyte, and adopting staff's determination that this action is exempt from CEQA.
- b. SPARK THERMIONICS, INC. Proposed resolution approving Agreement EPC-18-014 with Spark Thermionics, Inc. for a \$1,349,933 grant to scale-up production and validation of a thermionic energy harvester, which converts heat directly to electricity, and adopting staff's determination that this action is exempt from CEQA. This technology, combined with next-generation concentrating solar power (CSP) plants, has the potential to drive down the cost of CSP plants to 5.6 cents/kWh.
- c. CUBERG, INC. Proposed resolution approving Agreement EPC-18-015 with Cuberg, Inc. for a \$1,566,639 grant to setup and commission a pilot-scale production facility for manufacturing a non-flammable, innovative lithium-metal battery cell that has a high energy density, and adopting staff's determination that this action is exempt from CEQA.
- d. HALO INDUSTRIES, INC. Proposed resolution approving Agreement EPC-18-016 with Halo Industries, Inc. for a \$4,000,000 grant for the production scale-up and validation of a novel solar photovoltaics wafer manufacturing technology that could reduce solar wafer costs by 50 percent or more, and adopting staff's determination that this action is exempt from CEQA.
- e. SEPION TECHNOLOGIES, INC. Proposed resolution approving Agreement EPC-18-017 with Sepion Technologies, Inc. for a \$2,675,793 grant to scale-up production of a low-cost polymeric membrane separator, a key component in current and next-generation battery storage technologies, and adopting staff's determination that this action is exempt from CEQA.
- f. CABAN SYSTEMS INC. Proposed resolution approving Agreement EPC-18-018 with Caban Systems, Inc. for a \$1,878,760 grant to scale-up production of an innovative modular battery platform for critical infrastructure, particularly for telecommunication towers, and adopting staff's determination that this action is exempt from CEQA.
- g. TREAU, INC. Proposed resolution approving Agreement EPC-18-019 with Treau, Inc. for a \$2,805,907 grant to scale-up production of a unique low-cost polymer heat exchanger, a key component in heating, ventilation, and air conditioning appliances, expected to deliver higher efficiency cooling, faster adoption of electric heat pumps, and a more cost-effective transition to low-global warming potential refrigerants, and adopting staff's determination that this action is exempt from CEQA.
- h. GLINT PHOTONICS, INC. Proposed resolution approving Agreement EPC-18-020 with Glint Photonics, Inc. for a \$1,998,922 grant to develop a pilot line for high-efficiency adjustable lighting products that have measured useful lumen/watt improvement

compared to state-of-the-art luminaires, and adopting staff's determination that this action is exempt from CEQA.

- i. SOUTH 8 TECHNOLOGIES, INC. Proposed resolution approving Agreement EPC-18-021 with South 8 Technologies, Inc. for a \$1,028,059 grant to design and build-out a low rate initial production pilot line for the manufacturing of liquefied gas electrolyte batteries, which yield a high energy density and increase safety, and adopting staff's determination that this action is exempt from CEQA.
 - j. GENERAL ENGINEERING & RESEARCH, L.L.C. Proposed resolution approving Agreement EPC-18-025 with General Engineering & Research, L.L.C. for a \$1,088,188 grant to scale-up manufacturing of magnetocaloric materials used in magnetic refrigeration, which can reduce energy consumption over traditional vapor-compression refrigeration technologies by 50 percent, and adopting staff's determination that this action is exempt from CEQA.
13. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, ON BEHALF OF THE BERKELEY CAMPUS. Proposed resolution approving Agreement EPC-18-013 with the Regents of the University of California on behalf of the Berkeley campus, for a \$5,000,000 grant to deploy a block-scale retrofit development combining deep energy efficiency retrofit strategies, integrated distributed energy generation systems, and water conservation and capture systems in a low-to-middle income neighborhood in the City of Oakland, and adopting staff's determination that this action is exempt from CEQA. (EPIC Funding) Contact: James Friedrich. (Staff presentation: 5 minutes)
14. SPATIAL INFORMATICS GROUP, LLC. Proposed resolution approving Agreement EPC-18-026 with Spatial Informatics Group, LLC for a \$5,000,000 grant to develop next-generation wildfire models for grid resiliency and safety, and adopting staff's determination that this action is exempt from CEQA. Phase I of the grant (\$4,000,000) will involve advancing fire science and wildfire modeling. Phase II (\$1,000,000) would be conducted only if needed to support California's Fifth Climate Change Assessment. This project will illuminate the emerging risks of wildfire on the electricity grid by incorporating the dynamics of tree mortality and extreme fire weather in next-generation fire models. (EPIC Funding) Contact: Alex Horangic. (Staff presentation: 5 minutes).
15. BRINGING RAPID INNOVATION DEVELOPMENT TO GREEN ENERGY (BRIDGE) – ENERGY STORAGE, GFO-18-304. This solicitation sought proposals to fund technology demonstration and deployment of energy storage projects that will represent a 25 percent or higher scale up in power or energy from the previously awarded Energy Commission or U.S. federal agency grants. (EPIC funding) Contact: Qing Tian. (Staff presentation: 5 minutes)
- a. NATRON ENERGY, INC. Proposed resolution approving Agreement EPC-18-022 with Natron Energy, Inc. for a \$2,998,064 grant to demonstrate a sodium-ion battery energy storage system to support an electric vehicle fast charger and demonstrate its value to support deployment of associated high-power infrastructure, and adopting staff's determination that this action is exempt from CEQA.
 - b. EOS ENERGY STORAGE, LLC. Proposed resolution approving Agreement EPC-18-023 with Eos Energy Storage, LLC for a \$2,986,110 grant to scale up a zinc hybrid battery technology in a plug-and-play battery storage system to demonstrate improved power and energy density, and enable full characterization of performance in

peak shaving, load following, and frequency regulation, and adopting staff's determination that this action is exempt from CEQA.

- c. ELEMENT 16 TECHNOLOGIES, INC. Proposed resolution approving Agreement EPC-18-024 with Element 16 Technologies, Inc. for a \$3,000,000 grant to demonstrate a sulfur thermal battery technology for stationary storage and power generation, and field test converting the stored thermal energy to electricity in real-time, and adopting staff's determination that this action is exempt from CEQA.
16. NATIONAL RENEWABLE ENERGY LABORATORY. Proposed resolution approving Agreement 500-18-003 with National Renewable Energy Laboratory for a \$3,700,000 contract to conduct research that will develop and demonstrate low emission natural gas engine technology, related fueling infrastructure technology, and natural gas hybrid-electric vehicles, and adopting staff's determination that this action is exempt from CEQA. (PIER NG funding). Contact: Peter Chen. (Staff presentation: 5 minutes)
 17. ADVANCING NATURAL GAS ENERGY EFFICIENCY RESEARCH IN EXISTING BUILDINGS AND BAKING INDUSTRY, GFO-18-503. This solicitation sought proposals to develop, demonstrate, and validate the energy savings from advanced technologies and strategies to reduce natural gas use and greenhouse gas and other emissions in California's building and baking sectors. (PIER NG funding) Contact: Amir Ehyai. (Staff presentation: 5 minutes)
 - a. INSTITUTE OF GAS TECHNOLOGY. Proposed resolution approving Agreement PIR-18-005 with Institute of Gas Technology dba Gas Technology Institute for a \$1,000,000 grant to develop and demonstrate cost-effective, high efficiency solutions for retrofitting existing wall furnaces in California multi-family and single-family residences, and adopting staff's determination that this action is exempt from CEQA.
 - b. U.S. DOE-LAWRENCE BERKELEY NATIONAL LABORATORY. Proposed resolution approving Agreement PIR-18-006 with the U.S. Department of Energy's Lawrence Berkeley National Laboratory for a \$2,000,000 grant to develop cost-effective strategies to reduce natural gas use and environmental impacts of residential duct-less direct heating equipment, and adopting staff's determination that this action is exempt from CEQA.
 - c. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, ON BEHALF OF THE DAVIS CAMPUS. Proposed resolution approving Agreement PIR-18-007 with the Regents of the University of California, on behalf of the Davis campus for a \$1,570,000 grant to develop and test a cost-effective, phase change material-enhanced insulation solution for existing homes, and adopting staff's determination that this action is exempt from CEQA.
 18. PETITION TO REQUEST RULEMAKING HEARINGS. Consideration of and possible action, including approval of an order, on a petition requesting that the Commission initiate rulemaking hearings under Title 20 California Code of Regulations section 1221. The petition was filed with the Executive Director on April 16, 2019, and certified as complete by the Executive Director on April 23, 2019. Petitioner is requesting the rulemaking hearings to implement the provisions of Public Utilities Code 399.30(c)(4). Contact: Natalie Lee.

- a. Possible closed session deliberation on the above described petition. (Government Code Section 11126(c)(3)).
19. **Minutes.** Possible approval of the May 15, 2019 business meeting minutes.
20. **Lead Commissioner or Presiding Member Reports.** A lead commissioner on a policy matter may report to the Commission on the matter and discussion may follow. A presiding member on a delegated committee may report to the Commission on the matter and discussion may follow.
21. **Executive Director's Report.**
22. **Public Adviser's Report.**
23. **Public Comment.** Individuals may speak up to three minutes on any matter concerning the Energy Commission, with the exception of items appearing on this agenda or items related to pending adjudicative (certification or enforcement) proceedings.
24. **Chief Counsel's Report.**
 - a. Pursuant to Government Code section 11126(e), the Energy Commission may adjourn to closed session with its legal counsel to discuss any of the following matters to which the Commission is a party:
 - i. *In the Matter of U.S. Department of Energy (High Level Waste Repository)*, (Atomic Safety Licensing Board, CAB-04, 63-001-HLW); *State of California v. United States Department of Energy* (9th Cir. Docket No. 09-71014).
 - ii. *Communities for a Better Environment and Center for Biological Diversity v. Energy Resources Conservation and Development Commission, and California State Controller* (Alameda County Superior Court, Case No. RG13681262).
 - iii. *State Energy Resources Conservation and Development Commission v. Electricore, Inc. and ZeroTruck* (Sacramento County Superior Court, Case No. 34-2016-00204586)
 - iv. *Natural Resources Defense Council, Inc., et al. v. United States Department of Energy* (Federal District Court, Northern District of California, Case No. 17-cv-03404).
 - v. *City of Los Angeles, acting by and through, its Department of Water and Power v. California Energy Resources Conservation and Development Commission* (Los Angeles Superior Court, Case No. BS171477).
 - vi. *Helping Hand Tools v. California Energy Commission, and Vantage Data Centers LLC*. (Sacramento Superior Court, Case No. 34-2018-80003026)
 - vii. *In re: PG&E Corporation and In re: Pacific Gas and Electric Company* (United States Bankruptcy Court, Northern District of California, San Francisco Division, Case No. 19-30088)
 - viii. *Chukwuemeka (Emeka) Okemiri v. California Energy Commission, et al.* (Sacramento Superior Court, Case No. 34-2018-00246019).
 - ix. *State Energy Resources Conservation and Development Commission v. HyGen Industries, Inc.* (Sacramento County Superior Court No. 34-2019-00252543).
 - b. Pursuant to Government Code section 11126(e), the Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether facts and circumstances exist that warrant

the initiation of litigation, or that constitute a significant exposure to litigation against the Commission, which might include:

Participate by Telephone. To participate by telephone, call 1-888-823-5065 on business meeting days after 9:50 a.m. (Pacific Time). The passcode is "business meeting" and the call leader is Jerome Lee. If you plan to speak about a specific item, please give the item number to the operator.

In the event of technical problems with the telephone line, it is recommended that comments be submitted by email to publicadviser@energy.ca.gov or facsimile to (916) 654-4493 by 5 p.m., at least two days before the meeting.

View Live. <https://www.youtube.com/user/CalEnergyCommission/videos>

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You may also go to <https://energy.webex.com/ec> and click on the link for the meeting. If the link is not listed, click "Unlisted Events" on the left of the screen and enter event number **921 389 003**. The WebEx broadcast is listen only. To comment or ask a question, call in to the meeting as described above.

Public participation. Questions may be directed to the Public Adviser via email at publicadviser@energy.ca.gov, or by phone at 916-654-4489 or 800-822-6228.

Accommodation. Requests may be directed to Yolanda Rushin at 916-654-4310, at least five days before the meeting.

Wi-Fi. Access is available in the building's public areas (atrium, snack bar, and library).

Media. Inquiries may be directed to Media and Public Communications at 916-654-4989.

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Adjournment of Hearings and Meetings. Depending on time and the orderly management of proceedings, the Energy Commission may adjourn (recess or postpone) any noticed hearing or meeting to be continued the next day, another specific date or time, or the next business meeting. Any such adjournment will be noticed at the time the order of adjournment is made. (Government Code §§11128.5, 11129)